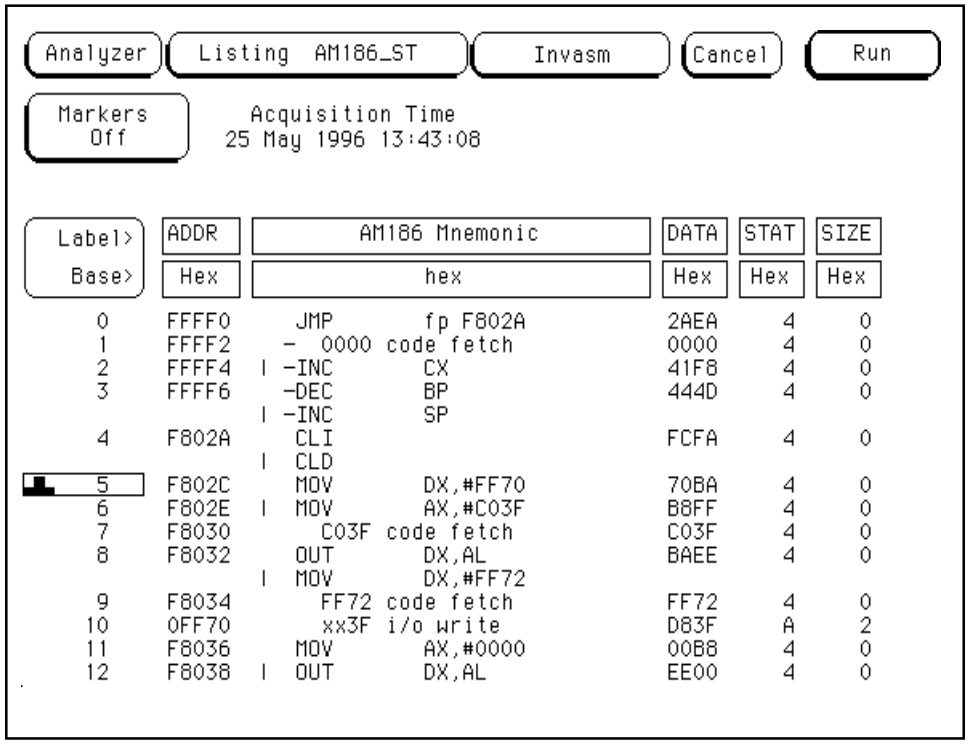
CORELIS

HEWLETT PACKARD
Premier Solution Partner

PI-Am186EM/ES and PI-Am188EM/ES PREPROCESSOR INTERFACE FOR USE WITH HP16500/1660/1670 LOGIC ANALYZERS

- **QUICK AND EASY CONNECTION OF LOGIC ANALYZER PODS TO THE AMD 186 EM/ES TARGET SYSTEM**
- **COMPLETE AM186EM/ESOR188EM/ES MNEMONIC DISASSEMBLY**
- **SUPPORT OF BOTH PQFP AND TQFP PACKAGES**
- **40 MHZ OPERATION**
- **LOW CAPACITANCE PROBING**
- **SET-UP AND DATA STORAGE ON BUILT-IN LOGIC ANALYZER DISK DRIVE**
- **TRACE DATA HARD COPY VIA RS-232 SERIAL PORT**
- **MULTIPLEXES AND DEMULTIPLEXES BOTH ADDRESS AND DATA**
- **MULTI-LAYER, LOW NOISE PCB CONSTRUCTION WITH GROUND AND POWER PLANES**



Corelis is a Hewlett-Packard Premier Solutions Partner. This designation was given to Corelis in recognition of our outstanding reputation as a supplier of high quality, reliable test tools for use with the HP family of logic analyzers. To earn this designation, Corelis has developed and supplied over 75 different types of preprocessors and bus analyzers to over 600 different customers. Our preprocessors and bus analyzers are used with a Hewlett-Packard logic analyzer to provide a physical and electrical connection between the logic analyzer and a developers target board or system. Each preprocessor is supplied with software that is loaded on the logic analyzer and allows a user to perform state or timing analysis as well as complete inverse assembly of your processor code. Corelis also develops custom test products for many different customers using "state-of-the-art" RISC processors, FPGAs, and high-speed busses. As a result, based on our design experience, our preprocessor products are designed to provide you with the information that you as a designer want to see.

GENERAL OVERVIEW

The PI-Am186 EM/ES or PI-Am188EM/ES preprocessor Interface provides a complete interface between any Am186 EM/ES or Am188EM/ES target system and the HP family of logic analyzers. The preprocessor configuration software on a flexible disk sets up the format specification menu of the logic analyzer for compatibility with the microprocessor. It also loads the inverse assembler (disassembler) for obtaining displays of the processor data in assembly language mnemonics. The Preprocessor Interface is a non-intrusive development tool and provides a powerful environment for debugging of both hardware and software real-time applications.

The preprocessor is attached directly to the Am186EM/ES or Am188EM/ES processor, thus eliminating any need to remove the processor from the target board. The logic analyzer pods, with HP01650-63201 termination adapters, plug directly onto the mating connectors on the preprocessor and provide tracing and monitoring of the processor signals. The signals are grouped in a logical order so that the logic analyzer configured with the disassembler software can display bus activity in mnemonic form. In addition to the mnemonic disassembly, the logic analyzer displays all the bus activity with the relevant status information.

The Inverse Assembler supplied with the preprocessor consists of a software package that when loaded into the HP logic analyzer, pre-processes and formats the state trace listings of the Logic Analyzer. The user can set multi-level trace traps to capture the area of interest. The Inverse Assembler allows the user to automatically decode and display hex machine op codes and display assembly code in mnemonic format. The Inverse Assembler uses the read and write signals as clocks to strobe the address and data into the Logic Analyzer. The Inverse Assembler can easily support 40 MHz CPUs.

High quality hard copy documentation makes recording of the data analysis results much easier. HP logic analyzers connect to several different printers via HP-IB or an RS-232 port, including the HP Thinkjet, HP Quietjet, HP Laserjet, HP Deskjet, and some Epson models. The HP16500 system also supports the HP Paintjet printer for excellent full color printouts.

SPECIFICATIONS

- **LOGIC ANALYZER REQUIRED**
  Hewlett-Packard HP1650, 16500, 1660, 1670 family of logic analyzers with three 16 channel pods required for full inverse assembly

- **MAXIMUM ACQUISITION SPEED**
  The maximum aquisition speed is only limited by the speed of the 186 chip. The maximum logic analyzer speed is up to 500 MHz.

- **SIGNAL LINE LOADING**
  20 pf @ 100K ohms

- **DEVICES SUPPORTED**
  186 EM/ES in a 100 pin PQFP
  188 EM/ES in a 100 pin PQFP

- **SUPPLIED EQUIPMENT**
  The PI-Am186EM/ES or PI-Am188EM/ES includes the preprocessor Interface module, disassembler, configuration software, and operating manual.

CORELIS **12607 Hidden Creek Way**
Cerritos, California 90703
Tel: (310) 926-6727, Fax: (310) 404-6196
sales@corelis.com
www.corelis.com

CORELIS INC., reserves the right to make changes in design or specification at any time without notice.